

MOX-APIS SERIES

MoxiE[®]
INDUCTOR CORPORATION

HIGH CURRENT METAL ALLOY POWER INDUCTORS

MoxiE's APIS series of power inductors are designed to provide ultra high current and low DCR. The metal alloy construction is ideal for DC/DC converters, communication devices & industrial electronics.

Features

- Low cost.
- Small copper loss design.
- Large current and low DCR.
- Magnetically shielded and suitable for high density mounting.

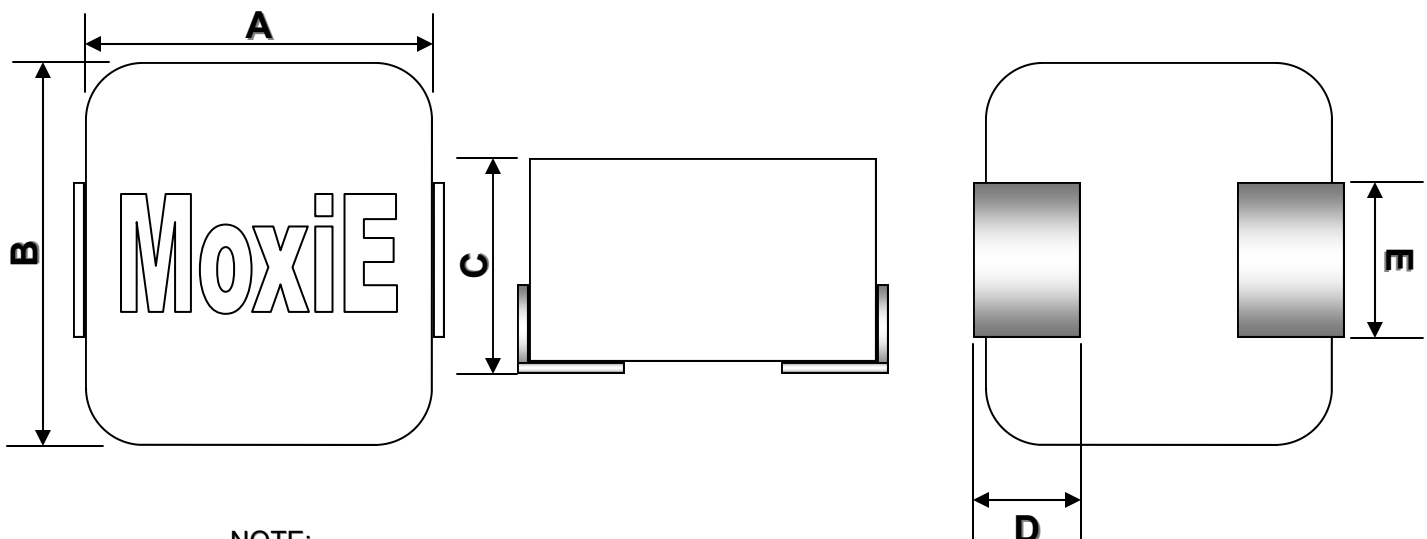


AVAILABLE PACKAGE TYPES

MoxiE Part Number	A	B	C	D	E
MOX-APIS-0402	4.50 MAX	4.00 ±0.2	2.00 MAX.	0.80 ±0.3	1.50± 0.3
MOX-APIS-0503	5.20 MAX	4.70 ±0.2	3.00 MAX.	1.00 ±0.3	1.50± 0.3
MOX-APIS-0601	7.40 MAX.	6.60 ±0.2	1.80 MAX.	1.60 ±0.3	3.00± 0.3
MOX-APIS-0602	7.40 MAX.	6.60 ±0.2	2.40 MAX.	1.60 ±0.3	3.00± 0.3
MOX-APIS-0607	7.40 MAX	6.60 ±0.2	3.00 MAX.	1.60 ±0.3	3.0± 0.3
MOX-APIS-0705	7.40 MAX	6.60 ±0.2	5.00 MAX.	1.60 ±0.3	3.00 ±0.3
MOX-APIS-1003	11.50 MAX	10.00 ±0.3	3.00 MAX.	2.00 ±0.5	3.00 ±0.5
MOX-APIS-1012	11.50 MAX.	10.00 ±0.3	4.00 MAX.	2.00 ±0.5	3.00 ±0.5
MOX-APIS-1411	13.80 MAX	12.60 ±0.3	3.50 MAX.	2.00 ±0.5	3.00 ±0.5
MOX-APIS-1413	13.80 MAX.	12.60 ±0.3	5.00 MAX.	2.00 ±0.5	3.00 ±0.5
MOX-APIS-1417	13.80 MAX.	12.60 ±0.3	6.50 MAX.	2.00 ±0.5	3.00 ±0.5



MECHANICAL DIMENSIONS



NOTE:
ALL DIMENSIONS IN MM

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ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR mΩ Max. (Typ.)	DCR mΩ Max. (Max.)	Isat (A Max.)	Irms (A Max.)
MOX-APIS-0402-R10M	0.10	4.50	5.00	11.00	32.00
MOX-APIS-0402-R22M	0.22	7.30	8.00	9.00	24.00
MOX-APIS-0402-R47M	0.47	16.0	18.00	5.60	11.50
MOX-APIS-0402-1R0M	1.00	33.0	37.00	3.75	8.50
MOX-APIS-0402-2R2M	2.20	80.0	90.00	2.85	6.00
MOX-APIS-0503-R68M	0.68	11.0	12.00	8.00	15.00
MOX-APIS-0503-1R0M	1.00	13.0	14.00	7.00	11.00
MOX-APIS-0503-1R5M	1.50	20.0	25.00	6.00	10.00
MOX-APIS-0503-2R2M	2.20	29.0	35.00	5.00	9.00
MOX-APIS-0503-3R3M	3.30	32.0	38.00	4.00	7.00
MOX-APIS-0601-R10M	0.10	2.10	2.50	18.00	40.00
MOX-APIS-0601-R15M	0.15	4.70	5.20	15.00	35.00
MOX-APIS-0601-R20M	0.20	5.30	5.70	14.00	30.00
MOX-APIS-0601-R33M	0.33	6.60	7.00	12.00	20.00
MOX-APIS-0601-R47M	0.47	8.40	9.30	11.00	18.00
MOX-APIS-0601-R68M	0.68	12.70	13.90	9.00	17.00
MOX-APIS-0601-R82M	0.82	13.80	15.90	8.00	16.00
MOX-APIS-0601-1R0M	1.00	17.50	18.30	6.00	14.00
MOX-APIS-0601-1R5M	1.50	32.60	34.00	4.00	11.00
MOX-APIS-0601-2R2M	2.20	40.30	46.00	3.75	10.00
MOX-APIS-0601-3R3M	3.30	56.20	60.10	3.25	9.00
MOX-APIS-0601-4R7M	4.70	76.60	80.20	3.00	8.00
MOX-APIS-0602-R10M	0.10	1.50	1.70	30.00	50.00
MOX-APIS-0602-R22M	0.22	2.90	3.20	21.00	35.00
MOX-APIS-0602-R33M	0.33	3.70	4.10	18.00	22.00
MOX-APIS-0602-R47M	0.47	6.00	6.50	13.50	20.00
MOX-APIS-0602-R68M	0.68	8.70	9.40	11.00	18.00
MOX-APIS-0602-R82M	0.82	10.60	11.80	10.00	17.00
MOX-APIS-0602-1R0M	1.00	13.10	14.20	9.00	16.00
MOX-APIS-0602-1R5M	1.50	18.50	21.20	7.50	15.00
MOX-APIS-0602-2R2M	2.20	28.00	34.00	6.50	14.00
MOX-APIS-0602-3R3M	3.30	36.50	51.60	5.00	13.00
MOX-APIS-0602-4R7M	4.70	45.20	63.00	4.50	10.00
MOX-APIS-0602-6R8M	6.80	72.50	95.00	3.50	9.00
MOX-APIS-0602-8R2M	8.20	74.20	106.00	3.00	8.00
MOX-APIS-0602-100M	10.00	115.60	129.00	2.50	7.00



ENGINEERING NOTES

- Operating temperature: -55°C to 105°C.
- Tolerance ±20% (M)
- Temperature rise: approximately 40°C at Irms.
- Inductance drop; approximately 30% max. at Isat.
- MoxiE test equipment: HP4192A LF impedance analyzer or equivalent (test frequency: 1KHz/0.5V) RDC: CH502BC.
- RoHS compliant.
- Packaging: Tape & Reel.
- MoxiE Inductor Corporation specifications are subject to change without notice.
- MoxiE Inductor Corporation custom designed products are subject to United States copyright and or patent protection(s).

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ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (µH)	DCR mΩ Max. (Typ.)	DCR mΩ Max. (Max.)	Isat (A Max.)	Irms (A Max.)
MOX-APIS-0607-R10M	0.10	0.90	1.20	30.00	60.00
MOX-APIS-0607-R20M	0.20	2.40	3.00	24.00	42.00
MOX-APIS-0607-R33M	0.33	3.50	3.90	20.00	32.00
MOX-APIS-0607-R47M	0.47	4.00	4.30	17.00	28.00
MOX-APIS-0607-R68M	0.68	5.00	5.50	15.00	26.00
MOX-APIS-0607-R82M	0.82	6.70	8.00	13.00	24.00
MOX-APIS-0607-1R0M	1.00	9.00	10.00	11.00	22.00
MOX-APIS-0607-1R5M	1.50	14.00	15.00	9.00	18.00
MOX-APIS-0607-2R2M	2.20	18.00	20.00	8.00	15.00
MOX-APIS-0607-3R3M	3.30	28.00	30.00	6.00	13.00
MOX-APIS-0607-4R7M	4.70	37.00	40.00	5.00	10.00
MOX-APIS-0607-6R8M	6.80	54.00	60.00	4.50	8.00
MOX-APIS-0607-8R2M	8.20	64.00	70.00	4.00	7.50
MOX-APIS-0607-100M	10.00	102.00	105.00	3.00	7.00
MOX-APIS-0705-R56M	0.56	3.40	3.60	18.00	20.00
MOX-APIS-0705-R68M	0.68	4.20	4.50	15.00	18.00
MOX-APIS-0705-1R0M	1.00	5.60	6.50	13.00	15.00
MOX-APIS-0705-R15M	1.50	8.60	9.00	11.00	12.00
MOX-APIS-0705-2R2M	2.20	13.00	13.60	8.00	10.00
MOX-APIS-1003-R47M	0.47	2.10	2.50	20.00	40.00
MOX-APIS-1003-1R0M	1.00	5.30	6.00	13.00	25.00
MOX-APIS-1003-100M	10.00	50.00	55.00	5.00	10.00
MOX-APIS-1012-R36M	0.36	1.10	1.30	30.00	60.00
MOX-APIS-1012-R45M	0.45	1.10	1.30	28.00	30.00
MOX-APIS-1012-R47M	0.47	1.60	1.80	25.00	55.00
MOX-APIS-1012-R56M	0.56	1.80	2.20	22.00	50.00
MOX-APIS-1012-R68M	0.68	2.40	2.70	20.00	42.00
MOX-APIS-1012-1R0M	1.00	3.50	4.10	18.00	36.00
MOX-APIS-1012-1R5M	1.50	4.50	5.20	16.00	32.00
MOX-APIS-1012-2R2M	2.20	6.90	7.80	12.00	27.00
MOX-APIS-1012-3R3M	3.30	10.80	11.80	10.00	21.00
MOX-APIS-1012-4R7M	4.70	15.00	16.50	9.00	17.00
MOX-APIS-1012-6R8M	6.80	21.20	23.30	7.50	13.50
MOX-APIS-1012-100M	10.00	27.50	30.00	6.00	12.00



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MOX-APIS-1411-R10M	0.10	0.80	0.96	42.00	80.00
MOX-APIS-1411-R22M	0.22	1.10	1.30	38.00	65.00
MOX-APIS-1411-R33M	0.33	1.30	1.50	36.00	62.00
MOX-APIS-1411-R47M	0.47	1.70	2.00	32.00	55.00
MOX-APIS-1411-R68M	0.68	2.30	2.50	28.00	49.00
MOX-APIS-1411-1R0M	1.00	3.30	3.50	24.00	40.00
MOX-APIS-1411-1R5M	1.50	5.10	5.50	19.00	35.00
MOX-APIS-1411-2R2M	2.20	7.20	8.00	16.00	29.00
MOX-APIS-1411-3R3M	3.30	11.00	12.00	12.00	27.00
MOX-APIS-1411-4R7M	4.70	14.30	15.00	10.00	24.00
MOX-APIS-1411-6R8M	6.80	19.80	22.00	9.00	18.00
MOX-APIS-1411-100M	10.00	30.40	34.00	7.00	14.00
MOX-APIS-1413-R10M	0.10	0.53	0.60	55.00	118.00
MOX-APIS-1413-R36M	0.36	0.85	1.10	40.00	75.00
MOX-APIS-1413-R47M	0.47	1.10	1.30	35.00	65.00
MOX-APIS-1413-R68M	0.68	1.50	1.70	30.00	55.00
MOX-APIS-1413-1R0M	1.00	2.10	2.50	25.00	50.00
MOX-APIS-1413-1R5M	1.50	3.40	4.10	20.00	40.00
MOX-APIS-1413-2R2M	2.20	4.60	5.50	16.00	35.00
MOX-APIS-1413-3R3M	3.30	7.70	9.20	14.00	30.00
MOX-APIS-1413-4R7M	4.70	12.80	15.00	12.00	25.00
MOX-APIS-1413-6R8M	6.80	15.40	18.50	10.00	20.00
MOX-APIS-1413-8R2M	8.20	18.90	22.50	9.00	18.00
MOX-APIS-1413-100M	10.00	21.40	25.50	8.00	16.00
MOX-APIS-1417-R10M	0.10	0.47	0.52	60.00	120.00
MOX-APIS-1417-R36M	0.36	0.83	0.96	45.00	80.00
MOX-APIS-1417-R47M	0.47	1.00	1.30	40.00	70.00
MOX-APIS-1417-R68M	0.68	1.40	1.60	35.00	60.00
MOX-APIS-1417-1R0M	1.00	1.70	2.00	30.00	50.00
MOX-APIS-1417-1R5M	1.50	2.50	3.10	25.00	42.00
MOX-APIS-1417-2R2M	2.20	3.50	4.20	22.00	40.00
MOX-APIS-1417-3R3M	3.30	5.70	6.80	18.00	35.00
MOX-APIS-1417-4R7M	4.70	9.50	11.30	15.00	30.00
MOX-APIS-1417-6R8M	6.80	13.20	14.30	11.00	20.00
MOX-APIS-1417-8R2M	8.20	14.50	15.50	10.00	18.00
MOX-APIS-1417-100M	10.00	16.50	17.50	9.00	16.00



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